

ABSTRACT OF THE INVENTION

A method for minimizing the Inter-Document Zone (IDZ) in printing system architectures with print engines running at constant speed, employing asynchronous paper delivery; and providing control over paper feed times. The method of the present invention comprising first receiving input electronic data of an image intended to be printed. Then, inspecting said data to determine both the lead edge (L.E.) and the trail edge (T.E.) blank borders of said image. A determination is then made as to whether the blank borders exceed a minimum design distance. If the blank border of the L.E. exceeds the minimum then the process causes the printing of that image to occur sooner. If the blank border of the T.E. exceeds the minimum then the process causes the finishing of printing that image, and the starting of any subsequent images, to occur sooner. This has the advantageous result of generating faster prints per minute with smaller paper to paper timing and identical intermediate substrate pass to pass timing to the nominal design guidelines. This technique varies the page-per-minute (ppm) throughput based on the border margins of each document through timing adjustments. As a result, there are no additional stress placed on any of the image drum subsystems because process speed remains relatively constant.